

State of Vermont **Public Service Board**

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April 11, 1996

VIA FEDERAL EXPRESS

Mr. William F. Caton, Acting Secretary Federal Communications Commission Room 222 DOCKET FILE COPY ORIGINAL

1919 M Street, NW Washington, D.C. 20554

Re: CC Docket Number 96-45

Dear Mr. Caton:

Please find enclosed for filing the comments of eight states in the above docket regarding a Federal-State Joint Board on Universal Service. I enclose an original and nine copies, in the belief that this will be enough copies for each commissioner. I also enclose one additional copy, marked "STAMP COPY." Please date stamp this copy and return it to me in the enclosed postage-paid envelope.

This filing is being made by Federal Express. Because of the risk of nondelivery, I am making a simultaneous filing by U.S. Mail consisting of five copies. Should both arrive, the mailed filing will provide additional copies for the Commission's staff. I am also filing a copy with the Commission's copy contractor and sending a diskette to Ms. Ernestine Creech in the Common Carrier Bureau.

Sincerely,

Policy Director

Enclosure

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In the Matter of Federal-State Joint Board on Universal Service))))	CC Docket No.		APR 1 2 1996
				F: 11 / 1770

COMMENTS OF:

THE STATE OF MAINE PUBLIC UTILITIES COMMISSION,
THE STATE OF MONTANA PUBLIC SERVICE COMMISSION,
THE STATE OF NEBRASKA PUBLIC SERVICE COMMISSION,
THE STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION,
THE STATE OF NEW MEXICO STATE CORPORATION COMMISSION,
THE STATE OF UTAH PUBLIC SERVICE COMMISSION,
THE STATE OF VERMONT DEPARTMENT OF PUBLIC SERVICE AND
PUBLIC SERVICE BOARD, AND
THE PUBLIC SERVICE COMMISSION OF WEST VIRGINIA

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SUMMARY

The Telecommunications Act of 1996 imposes an extraordinary burden on the Commission, to ensure that rates are reasonably comparable between rural, insular and high cost areas on the one hand and urban areas on the other. This statutory goal will not be met if the Commission fails to establish a high cost funding mechanism that is adequately funded. That system must also be targeted accurately to high cost areas. It should be based on reported costs of carriers, not on rates, since rates are extremely difficult to compare accurately and proxy models are not yet sufficiently mature to serve as a basis for distributing funds. In distributing funds, the Commission should avoid using any criteria that do not drive cost, such as the size of a company or the size of its study area. Although local rate measurement is necessarily too inexact to serve as a basis for fund distributions, the Commission should nevertheless seek data on rates and develop a mechanism for comparing rates.

State universal service programs are authorized under the 1996 Act, but the federal program should be sufficient to permit states to support supplemental programs and services. In establishing a definition of services supported by universal service funds, the Commission should balance the desire to support advanced services against any size limits it perceives for the funding system.

If the Commission desires to increase the subscriber line charge, it should do so only if it transfers responsibility for paying that charge from customers, who now perceive it as a local service charge, to interexchange carriers, who use the local loop as a part of their business. This interpretation will restore the separations principles established by the United States Supreme Court in *Smith v. Illinois Bell Telephone Company*.

The Commission should finance universal service programs by fairly collecting revenues from all service providers. "Net revenue" should be the preferred method to raise revenue because it is competitively neutral. Finally, Vermont's experience with a neutral administrator suggests that model could work at the federal level.

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COMMENTS

The Commenting States

The Commenting States are statutorily responsible for establishing just and reasonable rates, charges and practices for public utilities within their jurisdictions. They therefore are "State commission(s)" within the meaning of the Telecommunications Act of 1996. The eight Commenting States are Maine, Montana, Nebraska, New Hampshire, New Mexico, Utah, Vermont, and West Virginia. They hereby submit their comments on the Commission's Notice of Proposed Rulemaking and Order Establishing Joint Board.

Rural, Insular and High Cost Areas - The Statutory Standard

Section 254(b) prescribes seven principles for guidance in designing policies for the preservation and advancement of universal service. Principle (3), states, in part, that:

Consumers in all regions of the Nation, including . . . those in rural, insular, and high cost areas, should have access to telecommunications and information services . . . that are available at rates that are <u>reasonably</u> <u>comparable</u> to rates charged for similar services in urban areas. (emphasis added).

This principle must be acknowledged when determining the overall level and structure of universal service assistance.

These seven principles provide much more detailed guidance to the Commission on the goals for universal service than was available under the 1934 Act.

¹ E.g. 1996 Act. Sec. 101(a), §§ 251(e), 252(b).

Adequacy of Assistance to Rural, Insular and High Cost Areas

Universal service funding provided by the Commission to support high cost areas must be adequate to meet the new and ambitious statutory objectives found in the 1996 Act.² If the new system does not distribute sufficient funds to the state based upon a nondiscriminatory cost analysis, then "reasonably comparable" rates will simply not be possible, no matter how well designed the mechanisms to distribute assistance. Whatever mechanism the Commission selects to distribute assistance, it must provide adequate funding as well.

Adequate funding may require significantly greater federal assistance than existing programs.³ At present, there is little or no difference between rural and urban rates in many study areas. This condition is not due to federal efforts, but exists because states have established rate designs that impose average rates on both high cost and low cost areas. These rate designs amount to implicit transfers by the states, and have the effect of supporting universal service. As competition matures across the country, states will find increasing difficulty in maintaining average rates. To the extent that states permit de-averaging of rates, the transfers that are now implicit in existing rate designs must be converted into explicit transfers under the direction of the Commission's universal service mechanisms.

² Act of 1996, Sec. 101(a), §254(b)(3). The NPRM suggests that the Commission is aware of this increase in scope of the program. NPRM, paragraph 14, footnote 39. Previously, assistance to high cost areas was intended to "ensure that telephone rates are within the means of the average subscriber in all areas of the country." *Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board*, 96 FCC2d 781, 795 (1984).

³ One way to estimate the scale of the problem is to estimate the additional revenue needed to eliminate the dichotomy between large and small companies under the existing mechanism. If all local exchange carriers had been given assistance under the "small company" formula in 1994, the cost of the fund would have been approximately \$1.33 billion, rather than the \$0.77 billion actually distributed. If the Commission should also decide to merge the high cost fund with the DEM weighting program, the net cost increase might be smaller, since in many cases the carriers that receive significant DEM benefits do not have high loop costs.

Increased funding may conflict with the historical desire of the Commission to limit the growth of its existing High Cost Fund.⁴ However, these concerns were expressed before the 1996 Law was enacted. Since the 1996 Act gives the Commission new ways to raise universal service monies,⁵ the Commission's concern may have been lessened.

The 1996 Act authorizes state universal service programs, but it also delegates to the Commission the principal responsibility to ensure that national universal service objectives, including reasonably comparable rates between urban and rural areas, are met. Nothing in the law suggests that the federal responsibility to ensure that rates are "reasonably comparable" is conditional upon state participation, nor upon a state paying a "share" of the cost. Thus the Commission must design universal service mechanisms, based upon federal funding, that will be capable of avoiding non-comparable rates in rural, insular and high costs areas. The Commission should not suppose that State funds will be required in order to achieve this basic purpose.

As the Commission undertakes to design a new system, it will face the prospect of a much larger program than in the past. Yet it must resist the temptation to set an arbitrary upper limit on the funding that will be needed to achieve the statutory purpose. Certainly any high cost assistance program should provide incentives for efficient operation by service providers, and no funds should be raised that are not needed. However, the converse is equally true; all funds needed to meet the statutory objectives must be raised and distributed.

⁴ For example, in Docket 80-286, In re Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, the Commission issued a Notice of Proposed Rulemaking and Notice of Inquiry, FCC 95-282, released July 13, 1995. That notice proposed several measures to limit expenditures under the existing high cost assistance program, including establishing a "cap" on the size of the fund. ¶¶ 47-50.

⁵ The Commission is considering, for example, carrier contributions as a percentage of revenues, net of payments to other carriers. NPRM, paragraph 123. A similar proportional charge, net of wholesale transactions, has been successfully used to support Vermont's Universal Service Fund, thereby replacing a per-access line charge.

^{6 1996} Act, Sec. 101(a), §254(f).

Targeting of Assistance to Rural, Insular and High Cost Areas

Paragraph 27 of the NPRM seeks comment on how to calculate the payments needed to support universal and affordable service in rural, insular, and high-cost areas. The most important aspect of such a mechanism is that it effectively targets those geographical areas with the greatest need. The Commission must seek those criteria that will most effectively achieve the statutory goal and it should not use criteria that are irrelevant to or detract from achieving the goal.

High Cost Funds Should be Directed by Costs, Not Rates; Rates May be Used As An Indicator of Success in Managing Costs

Although "reasonably comparable rates" is a statutory objective of the 1996 Act, the mechanism designed by the Commission should not rely upon local rates as inputs into the calculation. As explained below, there are too many variables used in setting local rates, and too many different rate structures for rate comparisons to become a meaningful basis upon which to calculate assistance. Rather, while consumer rates should be monitored, they should be used only as an indicator of overall program effectiveness.

Traditionally, the Commission has used cost data reported by carriers to determine financial assistance. However, carrier costs can reflect policy choices made by the carrier, rather than unavoidable costs imposed by the carrier's environment. Some carriers, for example, may choose to minimize their costs in outside plant, while others invest more heavily in hopes of attaining broader dissemination of technologically advanced services. Moreover, the contours of high cost areas do not in general follow the boundaries of study areas, but are driven by factors like population dispersal and topography.⁸

⁷ There may be additional reasons to avoid using consumer rates as a direct input into the formula for assistance to rural and high cost areas. For example, such a system might give inappropriate incentives to state commissions in setting rates.

⁸ The preliminary data generated by the Benchmark Cost Model shows that some states, and individual geographic areas within states, have cost characteristics that are considerably higher than the costs experienced in other states and in other areas within a state. These high costs are caused by several factors, including greater population

One problem with the existing system, which is based upon depreciated cost, is that it may be biased in favor of areas with a recent history of population growth. Areas where the population is expanding tend to have newer undepreciated plant than areas with more stable settlement patterns. Given equality in plant quality, therefore, a growing area will have a higher book value of plant, per customer, than a stable area. To the extent that the 1996 Act is aimed at preserving universal service, no area should receive greater assistance simply because it has relatively new and undepreciated plant. If the Commission adopts a system based upon depreciated original cost, it should also consider an adjustment based upon the average age of the plant.

Proxy Models Are Not Sufficiently Mature to Serve As the Basis of Cost Distributions

Ideally, the Commission's system for providing assistance for rural and high cost areas would not be influenced by the behavior or policies of particular carriers. If the input factors for calculating financial assistance can be made behaviorally independent - perhaps by utilizing such factors as topography or population distribution -- the Commission can be assured that its programs will be responding to legitimate cost differences from one area to another. In that sense, the ideal distribution formula would utilize objective input data for calculating assistance to rural and high cost areas, and not man-made or controllable factors.

If universal support mechanisms are to adequately address localized cost differences, ultimately they should base funding upon the costs of providing service to a specific area, rather than on the average characteristics of the study area, the size of the study area, or the nature of the company providing service. However, proxy factors should be used in lieu of actual book costs only if a reliable engineering and economic model can be developed that includes most of the significant factors that actually drive the costs of providing service.

dispersal and topography.

Unfortunately, none of the models presented to date comes very close to meeting that goal, even though the Benchmark Cost Model developed by the Joint Sponsors' is starting to show promise. Before the Benchmark Cost Model is even considered for use, its sponsors should provide sufficient information to show that its results bear some relationship to the actual cost of providing service today. Nevertheless, the Commission must remain mindful that even a perfect proxy model will predict costs that are different from the actual book costs of many LECs. Therefore, if that proxy model is used, the Commission should adopt some mechanism, or at least a transition scheme, to ensure that those companies receiving reduced assistance will continue to be able to provide universal service at affordable rates.

Based on our analysis of the Benchmark Cost Model, as of March 1, 1996, the following modifications must be made before it could reasonably be considered for use as a proxy for cost.

- 1. Business lines must be included in the outside plant design.
- 2. New assumptions for population distribution must be developed to replace the present assumption of uniform population distribution. These should reflect settlement patterns in various areas of the country.
- 3. Switching costs should be developed using differing switch vendors, switch sizes, and switch topologies and architectures including host-remote configurations.

⁹ Described in paragraphs 31 and 32 of the NPRM.

The Commenters (Maine and Utah) have staff members who have been actively monitoring and participating in the development of this model and are willing to continue this effort with the Joint Sponsors in the future. Utah staff, for example, is evaluating proposed model enhancements pursuant to an April, 1995 order by the Utah Commission that states that subsidies (in a successor intrastate USF) be targeted "to discrete geographic areas within an exchange where high cost-causative elements exist." Staff was directed to analyze the sensitivity of individual company distributions to movement from embedded to LRIC cost methods. In addition, they were directed to analyze the relative effect on fund recipients of the various proxies incorporated in the predecessor "distance/density" model.

- 4. The distribution architecture assumptions should more accurately reflect actual practice when serving areas of varied density and topographic characteristics.
- 5. No census block group should be assigned to a wire center not capable of serving it, such as, for example, across a body of water or over a large mountain range.
- 6. A variable based on terrain should be added to reflect the fact that in hilly or mountainous areas loop plant distances exceed point-to-point airline mile lengths.
- 7. The cost of connecting the exchange (central office) to the public switched network, such as through microwave, trunk or satellite facilities, must be included in the cost model.
- 8. In extremely remote areas or those not accessible by road, an extra-high cost variable should be added. However, where wireless technologies (including satellite) are the least cost approach to providing universal service in those areas, the wireless costs should be substituted for wireline.

The Commenting States think this model has considerable promise, and should continue to be developed by the Commission.¹¹ Until a consensus develops on a proxy model, however, the Commission should, at least for now, continue to rely upon cost data reported by existing local exchange carriers.¹² This has been the approach used by

A review of an *ex parte* presentation made by the Joint Sponsors of the Benchmark Cost Model to the staff of the Commission on February 21, 1996 indicates that the Joint Sponsors are beginning to address many, but not all, of the modifications identified here.

For the reasons indicated above, the Commission may want to consider using gross plant investment rather than net book cost as currently used in order to ameliorate the fact that high growth areas have higher net book costs than more stable developed areas.

the Commission to date, and, while not ideal, it provides a sufficient basis for evaluating the cost of wireline service.¹³

Factors That Do Not Drive Cost Should Not Be Included In Any High Cost Formula

The second aspect of the targeting criterion is that the Commission should avoid factors that are not demonstrably the drivers of cost and hence of rates. For example, in the past, the Commission's rules for supporting high cost local loops has created a size-based distinction at 200,000 lines. Smaller companies with high costs received federal subsidies that covered a high percentage at the margin of the company's cost. Larger companies, however, were allowed a much smaller proportion of recovery.

The 200,000 line size dichotomy may at one time have been based upon legitimate policy considerations, at least as it applied in much of the nation. It may have been true in the past that large companies, in general, had opportunities to file "average" rates over large territories, thus internalizing subsidies among customers within their service territories.

Of course, the benefits of averaging have depended upon having a significant low-cost area available. Rural states like Vermont and Maine do not have significant urban areas, and accordingly their rural customers receive relatively little benefit from state mandated rate averaging. Therefore, companies such as NYNEX-Vermont, NYNEX-Maine, and Bell Atlantic-West Virginia, which have very few low cost areas, have not been able to produce revenues sufficient to adequately subsidize high cost areas.

¹³ If book costs are used, transport costs must be added to the loop and switching costs currently used to determine high cost. Those transport costs are the costs necessary to connect the exchange to the public switched network at the first tandem. Failure to include these costs as an important cost driver will deny assistance to companies who have relatively low loop and switching costs but extremely high costs to tie their networks to the world. For example, the Island Telephone Company provides service to several islands off the coast of Maine.

Under the 1996 Act, States are forbidden, in certain areas, to establish barriers to entry into local exchange service competition.¹⁴ The Act thus will promote competition, but in areas that have high density, and hence low loop costs, competition will erode the ability of large companies to engage in rate averaging. Thus to the extent that the 200,000 line distinction ever had any legitimate policy purpose, that purpose is now gone. It is no longer reasonable to assume that large companies will have the ability to extract excess contribution from low cost areas.

Similar distinctions based upon size have existed in the Commission's treatment of switching equipment. Currently the DEM weighting mechanism assigns switching equipment costs away from the intrastate jurisdiction based upon company size, and not necessarily on company cost. Company size is not necessarily predictive of actual cost. The Commenters believe that actual cost is a more appropriate basis for distributing federal assistance.

Precise targeting assumes even greater importance if the Commission should restrict funding for universal service. Should the Commission conclude that it should raise not more than a fixed amount of revenue, its distribution mechanisms should not inappropriately or disproportionately reduce benefits to high cost areas. If funds are limited, they should be spent in areas where the need is greatest. Assuming the continuation of something like the present high cost program, several payment-reducing options would be relatively benign.

The Commission could eliminate payments that will not make much difference to the recipients. For example, if all local exchange companies had been eligible in 1994 for the "small company" formula, but no assistance was provided to any company entitled to less than \$2.00 per month per access line, the cost of the program would have been approximately \$1.02 billion. This is a figure higher than the \$0.77 billion actually expended, but lower than the \$1.33 billion that would have been expended if all companies had received the "small company" assistance formula.¹⁵

¹⁴ 1996 Act, Sec. 101(a), § 253(a).

¹⁵ Because of page limitations established by the Commission, the underlying worksheets are not attached. They will be made available on request.

- 2) The Commission could subtract a fixed amount from each carrier's eligibility. For example, if all local exchange companies had been eligible in 1994 for the "small company" formula, but each recipient had received a deduction of \$1.00 per access line per month, the cost of the program would have been approximately \$0.94 billion.¹⁶
- The Commission could consider the loop, switch and transport assistance mechanisms together so that a company will receive assistance only if the total of those costs is greater than the national average. This will lessen the needed size of the fund because companies with high loop costs but low switching costs (or low loop but high switching) will not receive as much assistance.
- 4) Establish a higher threshold for cost recovery.¹⁷

Any of these mechanisms, while not specifically mandated by the language of the 1996 Act, would at least be more rational in a competitive environment than a reduction based solely upon the size of the carrier's study area. A size-based reduction would continue to produce hardships for customers in high cost areas served by carriers who have only a limited ability to produce internal cross-subsidies. Moreover, a size-based reduction would not only be bad public policy, but would almost certainly fail to achieve the statutory goal of "reasonably comparable" rates.

The Commission's NPRM recognizes that one problem with utilizing reported

¹⁶ Because of page limitations established by the Commission, the underlying worksheets are not attached. They will be made available on request.

¹⁷ This option is discussed below under the Defining Reasonably Comparable Rates section.

¹⁸ Such carriers typically are large companies serving rural states that do not have large population centers.

costs is that not every eligible carrier will be subject to accounting rules under Part 36. For those carriers, the Commenting States suggest that the Commission authorize a benefit for such carriers equal to the per-line benefit paid to a carrier serving a customer in that location under traditional accounting rules. This might, for example, entitle cellular or PCS carriers to receive benefits, provided they provide all essential services.

Measuring and Evaluating Local Rates

While the 1996 Act mandates "reasonably comparable" rates between urban and rural areas, a simple comparison of tariffed local exchange rates would be misleading. Rates tend to vary from state to state, and from carrier to carrier, for numerous reasons unrelated to cost. In many cases these causes for rate variation will not affect universal service, but merely reflect legitimate local variations in rate design. If the Commission should fail to take account of these factors, it may produce data that are more reflective of each state's rate design than of consumer burden. Some of these factors are listed below:

- 1. Local calling areas vary greatly in geographic extent. Customers of many high cost local exchange carriers do not enjoy local calling area of such wide scope as is typically provided in the standard service package of urban LECs. Rural LEC customers may have calling areas limited both in size and in the numbers of locally accessible lines, while urban customers often can reach millions of other lines, many miles away, with locally rated calls. Consequently, the customers of many high-cost LECs incur substantial toll bills to access essential services and communities of service that urban customers may take for granted. One means of recognizing limited calling area scope would be to adjust on the basis of the average number of subscribers accessible by local call in a study area or region.
- 2. State commissions vary considerably in the proportion of fixed costs they allocate to local services, as opposed to intrastate toll services.

¹⁹ Rate design in Illinois is an example of why such an adjustment is needed. Illinois, a relatively low cost state, has assigned almost all its intrastate NTS costs to

- 3. Rate designs vary in the proportions of local service revenue derived from per-minute charges and from monthly recurring charges. The analysis should recognize that some LECs charge by the message or minute for local usage while others do not. It would be reasonable to compare urban and rural rates on the basis of an average volume of usage.
- 4. In some locations, touch-tone service is not included in the rate, but is purchased separately.
- Some companies use mileage charges to recover additional revenues from customers located a significant distance from the wire center. These revenues must be considered in measuring the total charge faced by the customer.
- 6. Rate designs vary in the contribution to fixed costs made by business customers. In some states rates for business lines are considerably higher than for residential lines.²⁰

The Commission must try to develop a monitoring methodology to compare rates on a common basis. Because the 1996 Act requires "reasonably comparable" rates, the Commission must develop a methodology to compare rates on a common basis. This will be a difficult task, and one that is unlikely to produce meaningful results in the near future. Moreover, such an effort may require as many resources as efforts to measure household penetration. Nevertheless, monitored rate levels will serve as a check to determine whether the Commission's universal service funding program (with distributions based on costs) has achieved the statutory objective of reasonably comparable rates.

local service. Accordingly, its local rates are high and its intrastate toll rates are low.

²⁰ This factor may decrease in importance over time by competition or regulatory mandate.

Defining "Reasonably Comparable" Rates

The 1996 Act requires the Commission to ensure that rates are "reasonably comparable" between rural, insular and high cost areas, on the one hand, and urban areas on the other hand.²¹ The Commission therefore will be required to develop an operational definition of "reasonably comparable." The Commission should keep two factors in mind.

First, the preceding section discussed the methodological difficulties in measuring rates. Given these unresolved problems, even if the Commission were to adopt a perfect distribution system based upon costs and were to fund it to the full extent required, it should still expect to find some continuing differences in local exchange rates.

Second, the Commission should distinguish between two kinds of ratios. First is the ratio of rural-to-average. This is the *cost* ratio used by the existing high cost assistance system, under which a company can receive assistance if its costs exceed 115 percent of the national average. The second kind of ratio is rural-to-urban. In any population, the second ratio will be larger than the first. For example, company A might have rates 20 percent above average. Company B might have rates 20 percent below average. The rural-to-average ratio is 120% (= 120/100). However, the rural-to-urban ratio is 150% (= 120/80). This is the kind of *rates* ratio established in the 1996 Act.

Both of these factors accentuate the importance of setting a strict threshold for assistance in any cost-based distribution system. If even a perfect distribution system will produce some variation in measured rates, the distribution system must be at least very good to achieve "reasonably comparable" rates between urban and rural areas.

For these reasons, if the Commission should establish a cost-based mechanism to aid rural, insular and high-cost areas, it must also establish a low threshold at which carrier costs become eligible for assistance. The Commenters suggest that a cost equal to 110 percent of the national average should be established as the threshold for

²¹ 1996 Act, Sec. 101(a), § 253(b)(3).

assistance. This could be expected to produce a high-to-low ratio of rates of approximately 120 percent or 125 percent.

Role of State Universal Service Programs

We noted above that the achievement of reasonably comparable rates is a federal responsibility, although the 1996 Act explicitly authorizes state programs.²² Before designing programs at either the state or federal level, however, some understanding is necessary concerning how the two systems might work together. Any federal program for assistance to rural, insular and high cost areas should accommodate and work harmoniously with rationally designed state programs.

The Act permits the states to establish their own universal service "mechanisms." Certainly states have established such mechanisms informally, usually in the form of rate designs that establish averaged rates between urban and rural areas.

Because of the breadth of the federal responsibility, however, explicit state programs to support universal service will be supplementary to the federal effort, and will be aimed at "additional definitions and standards." For example, if the federal system supports emergency services, state programs might go farther and support enhanced 911, a program with additional features and significantly higher costs. States could also decide to go beyond "reasonably comparable" rates and establish "equal rates" as the state standard.

In conclusion, while the Act leaves room for the states to support, from stateraised funds, the universal availability of "additional" standards, the principal responsibility for raising and distributing funds lies with the Commission.

²² 1996 Act, Sec. 101(a), §254(f) (authorizes state programs). The present NPRM does not address the portion of the statute relating to state universal service programs. NPRM, paragraph 12.

²³ 1996 Act, Sec. 101(a), § 254(f).

Supported Services

The 1996 Act requires the Commission to define "the services that are supported by Federal universal service support mechanisms" ("supported services").²⁴ The Commission should ensure that supported services are defined broadly enough to allow all parts of the country to receive quality services and to have access to advanced services.²⁵

At the same time, the Commission should remain aware that each time a service is added to the definition of supported service, the demand for funding for universal service mechanisms may increase. If the Commission should decide to define "supported services" broadly, it must be prepared to appropriately enlarge the financial capacity of its universal service efforts.

The Subscriber Line Charge

In paragraphs 112-115 of its notice the Commission referred to the Federal-State Joint Board questions regarding the recovery of interstate-allocated subscriber loop costs. In particular, the Commission seeks comments regarding the advisability of reducing the carrier common line charge and increasing the existing Subscriber Line Charge (SLC) level. In support of the proposition of increasing the SLC, the Commission cites the comments of those persons who have argued that those costs associated with facilities dedicated to the use of a single subscriber should be recovered through a flat, non-traffic sensitive charge assessed on all end users.

While the Commenting States agree that economic theory may suggest that it is not economically efficient to recover non-traffic sensitive costs on a traffic sensitive basis, it does not follow that those costs must be recovered from end-users on a flat rated basis. From the perspective of economic efficiency, what is important is the flat structure of the charge and not who pays it. From the perspective of equity and

²⁴ 1996 Act, Sec. 101(a), § 254(a)(2). See paragraphs 15 through 23 of the NPRM.

²⁵ Act of 1996, §101(a), § 254(b)(3).

fairness, however, those who pay the charge is most important. Interexchange carriers should pay a portion of the non-traffic sensitive loop cost because they use the local exchange carriers' loop plant as a part of the network by which they provide service to their customers. Any apparent conflict between efficiency and equity can be resolved in the following manner:

- (1) All interstate NTS costs would be identified and reduced to a per line charge or rate.
- (2) That charge or rate would then be assessed to the interexchange carrier to which the end user has presubscribed.
- (3) If casual use of other carriers' services is made by the end user, a per line charge would be divided among all carriers using the common line on the basis of relative usage by each carrier.
- (4) Interexchange carriers would be free to recover the flat charge made to them in any way the market will allow. This might be through a minimum bill, through collecting part or all of the end user customer charge, tapered usage rates, etc.) so long as the charges are made to the end user by the interexchange carrier and not the local exchange carrier.

One advantage of this mechanism would be greater consumer understanding. Consumers now tend to think that their only charges for interstate service are the perminute charges billed to them by their interexchange carriers. They are often surprised to discover that a part of what they perceive as their bill for local service includes a non-optional \$3.50 per month for the right to access the interstate network.

Interexchange carriers may recover this charge in a variety of ways from their customers. For some carriers, "Ramsey pricing" will dictate the imposition of flat end user charges. However, some carriers may choose to absorb that charge or part of it as a part of their cost of doing business, or to obtain a competitive advantage. As the market becomes more competitive, the various market participants may be less able to recover fixed (non-variable) costs through flat end-user charges. The plan advanced here will allow the marketplace to determine how NTS costs are ultimately recovered

from end users rather than prescriptively requiring that they be recovered in all cases in the same way.

Smith v. Illinois Bell Telephone Company, requires the establishment of a separations process to allocate a portion of NTS local exchange costs to the interstate jurisdiction. However, Smith does not dictate how the Commission may recover these costs once they have been assigned. Our proposal here is not only consistent with Smith, but is more consistent than the Commission's proposal to require payment of an end user charge that amounts to an increase in the local exchange rate. To impose all NTS costs (including the interstate portion) directly on the end user, as a condition of obtaining local service, would strip Smith of all practical effect. An examination of the ratemaking controversy settled by Smith unequivocally supports this proposition.

Before the *Smith* decision, the greatest controversy over the setting of telephone rates was whether all the costs of providing local telephone loop plant should be collected through local exchange rates. Under the "board-to-board" theory, local exchange rates included all the costs of loop plant (now called NTS costs), as well as all local switching costs. Toll rates were based on toll costs which were defined to include only the cost of the toll switchboards as well as the interexchange transport equipment between the toll switchboards, giving rise to the term "board-to-board."

The alternative ratemaking theory, called "station-to-station" ratemaking, apportioned the costs of exchange loop plant and switching equipment between exchange and toll service. Station-to-station ratemaking is conceptually supported by the fact that all plant from the originating to the terminating telephone station, as well as local switching, are commonly used and absolutely necessary to complete toll calls. Since loop plant (now NTS plant) as well as local switching are jointly used for both tolls and local service their costs are apportioned between the two services under station-to-station ratemaking.

²⁶ 282 U.S. 133 (1930).

Before the Supreme Court decided *Smith*, most State regulatory commissions adopted the "board-to-board" principle of ratemaking. ²⁷ *Smith* arose from a ratemaking case in which the Illinois Commerce Commission adopted "station-to-station" ratemaking because it felt that the "board-to-board" method improperly required exchange ratepayers to subsidize toll service. Although the United States District Court enjoined the Illinois Commerce Commission and required them to use Illinois Bell's preferred "board-to-board" ratemaking approach in *Illinois Bell Tel. Co. v. Moynihan*, ²⁸ the Supreme Court clearly abandoned "board-to-board" ratemaking when it reversed the District Court by saying that:

[i]t is obvious that, unless an apportionment is made, the intrastate service to which exchange property is allocated will bear an undue burden.²⁹

Any action by the Commission which reallocate NTS costs back to local exchange customers through a flat interstate charge that is a condition precedent to obtaining *local* service constitutes nothing short of a reimposition of the same "board-to-board" ratemaking theory rejected by the United States Supreme Court. An interstate end user charge collecting all interstate allocated NTS costs would nullify the very reason separations was created in the first place, to get away from "board-to-board" ratemaking. For *Smith* to logically mean anything, some portion of the NTS local exchange costs must be allocated to the interstate jurisdiction and be recovered by a means other than one which amounts to an increase in the local exchange rate.

When Congress enacted the most recent separations legislation, it reaffirmed a commitment to "station-to-station" ratemaking by recognizing that the toll network "would be worthless" without local telephone loop plant.³⁰ That policy can only be

²⁷ See e.g., Re: Indiana Bell Telephone Co., P.U.R. 1922C, 348 (Ind.); Buck v. New York Tel. Co., P.U.R. 1921E, 798 (N.Y.).

²⁸ 38 F. 2d 77 (N.D. III. 1930).

²⁹ Smith v. Illinois, supra, at p. 151, See also Gabel, Development of separations principles in the Telephone Industry, 24 (Mich. St. Univ. Press 1967).

^{30 117} Cong. Rec. S. 15,981 (1971).

continued by assigning the interstate allocated NTS costs to the use to which they are put; to interexchange carriers and their ratepayers as we have suggested.

Moreover, before the policy decision is made to increase a non-optional, flat rate end user charge for the purpose of recovering a greater proportion of interstate NTS costs, the FCC must determine what effect that increase in the level prices for telephone service will have on subscribership. Based on the study relied upon by the FCC in rendering its original decision in Docket No. 78-72, an increase of the magnitude necessary to eliminate the common line charge, could drive a significant number of Americans from the telephone network.³¹

We believe that the Commission should be wary of assuming that the affects of a substantial increase in the subscriber line charge can be sufficiently ameliorated by universal service mechanisms such as targeted subsidies. Although explicit universal service support mechanisms may help preserve universal telephone service in very high cost areas, an increased end user charge could permit significant increases in base entry level prices for service in some areas which have not been modeled and are not known at this time.

Similarly, lifeline mechanisms may be inadequate because once end-user charges are increased, an unknown but significant number of customers may be unable to afford the basic quality telephone service they enjoy today.

If the Commission is not inclined to shift the SLC from an end user charge to a charge paid by interexchange carriers, at the very least is should consider adjusting the SLC over time. Traffic sensitive access rates are currently capped and are subject to a productivity adjustment. With improvement of line concentration technology and build-out of Subscriber Line Carriers, there is no question that subscriber line costs are experiencing productivity improvements along with other cost of the public switched network. Consumers will not reap those productivity gains if a productivity adjustment

See Third Report and Order, Appendix G, Table 3; The "Pearl I" study shows an approximate nine (9) percent drop-off rate with the proposed \$6.00 end user plan. This study was submitted by AT&T as an exhibit in the Divestiture proceeding, "Pearl II" has been developed as a retreat from the Pearl I conclusions.

is not applied to the SLC. Further, because the cost of subscriber line equipment is decreasing in both real and nominal terms, any increase of the SLC would be inconsistent with the trend of costs to carriers.

Administration of Support Mechanisms

Paragraphs 121 through 126 of the NPRM seek comment on how contributions to federal Universal Service mechanisms should be assessed. The statutory goals of equitable and nondiscriminatory contributions³² and specific and predictable support mechanisms³³ can best and most equitably be met by spreading the funding burden across all services provided by any and all interstate providers in equal proportion to revenue.

Paragraph 123 of the NPRM suggests collecting contributions on net revenues, after subtracting revenues paid to other carriers. This amounts to an exclusion of wholesale transactions between carriers. The Commission should strive to avoid charging the same service twice, and this wholesale exemption should accomplish that purpose. This will ensure that the system is neutral as between carriers who purchase services at wholesale and those vertically integrated carriers who purchase relatively few components from others.³⁴

Paragraphs 127 through 131 of the NPRM seek comment on fund administration. One option under consideration is appointment of a neutral fund administrator. Vermont has had a neutral fund administrator since 1994 for its Universal Service Fund. That administrator was selected for a three year contract from among seven competitors who submitted formal bids. Criteria for selection included cost, ability to handle deposits and payments, ability to invest securely, and knowledge of the telecommunications industry. Telecommunications carriers were disqualified from

³² 1996 Act, Sec. 101(a), § 254(b)4.

^{33 1996} Act, Sec. 101(a), § 254(b)5.

³⁴ The Vermont Universal Service Fund has been operating successfully since October, 1994, using similar principles, although in Vermont the charge is assessed on the customer purchase, rather than on the carrier's revenue.